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Giant Fibroadenoma Presenting Like Fungating Breast Cancer

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ABSTRACT:
This is a presentation of a 21 year old unmarried nulliparous Indian girl with a massive ulcerating and fungating left breast mass that was initially thought to be a fungating locally advanced breast carcinoma on clinical examination. Further examination of the morphology of the resected surgical specimen, histological and cytopathological examination confirmed it to be a giant fibroadenoma of the breast. It was successfully managed by partial mastectomy with an excellent result and a high degree of patient satisfaction was achieved. Though a rare clinical entity benign breast tumor can present like a fungating breast cancer and this must be borne in mind, especially in young adolescent patients presenting with ulcerating breast tumor.

Key-words: Breast cancer, Fibroadenoma, Fungating.

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INTRODUCTION:

Fibroadenoma is the most common breast mass in the adolescent.[1, 2, 3] Giant or juvenile fibroadenoma accounts for 0.5-2 per cent of all cases of fibroadenoma.[4] This subtype is characterized by its large size and rapid growth.[5, 6] Giant breast tumors are rapidly growing breast masses with diameters exceeding 5 cm and/or weights of more than 500 gm.[7, 8] They can rarely grow to immense proportions, resulting in congestion and ulceration of skin by centrifugal pressure.[7] Such an enlargement of the breast can be due to giant fibroadenoma, cystosarcoma phylloides or virginal hypertrophy, occurring in that order of Frequency.[8, 9, 10]These tumors are believed to be closely related variants of a similar pathologic process.[10] They are characterized by proliferation of epithelial and connective tissue elements in varying proportions. The peak age-incidence is reported to be 17-20 years and less than 5% of these giant fibroadenoma occurs below 18 years.[11] It is very rare for young adult girls to present with a giant fungating benign breast lesion which could easily be confused with breast carcinoma. This paper reported a case of fungating giant fibroadenoma of the breast and it also outlines the challenges, encounter during the clinical management of the patient. Carcinoma of the breast on the other hand has been on the increase so much that it has assumed an epidemiological dimension. In a developing country such as India late presentation of breast cancer has remained a rule rather than an exception and it is very common for patients to present with fungating breast lesion.

CASE PRESENTATION:

A 21 year old unmarried nulliparous Indian girl presented in the Outdoor Patient Department of with a 1 year history of unilateral left breast swelling which has become rapidly progressive in the last 1 month with spontaneous ulceration of the overlying skin and bleeding and pus discharge 5 days prior to presentation. There was no preceding history of trauma to the breast. She had a month history of intermittent left breast pain which was

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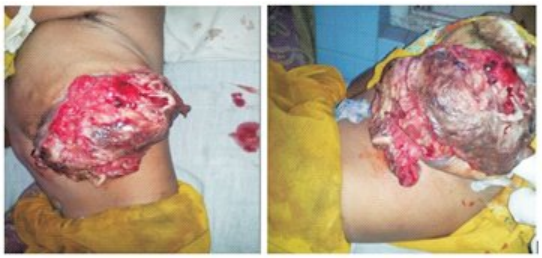

Figure-1: Picture shows huge giant fibroadenoma of the left breast reaching below the umbilical level to the pelvis of the patient with the destruction of the nipple areola complex.

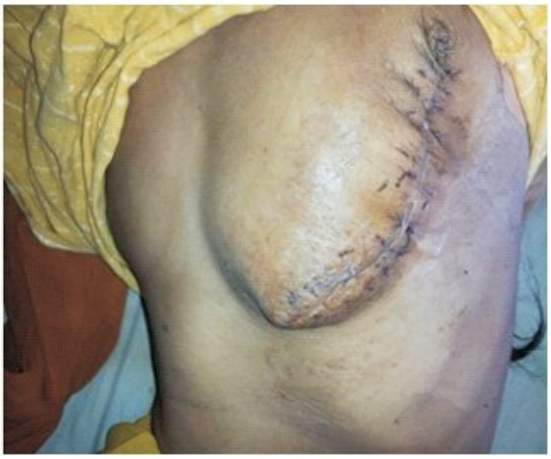

Figure-2: Postoperative condition of the patient being followed up in the outpatient clinic.

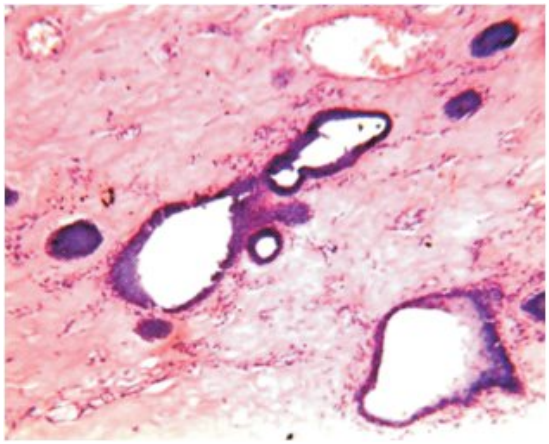

Figure-3: Histopthological image showing fibroadenoma with ductal hyperplasia with minimal leukocyte infiltration at a magnification of x 100.

An incisional biopsy and imprint cytology showed hyperplasia of the stroma and the epithelial lining the ducts with no evidence of malignancy and diagnosis of giant fibroadenoma was made. The initial clinical diagnosis was fungating breast cancer with a possible differential diagnosis of cystosarcoma phylloides, primary Burkitt lymphoma and carcinoma of the breast. She was adequately resuscitated with intravenous fluid and antibiotics (intravenous Amoxyclav 20 mg per kilogram and intravenous Metronidazole at 7.5 mg per kilogram body weight). 1 unit (350 ml) of red cell concentrate was given pre-operatively. Complete with wide excision of the tumor (partial mastectomy) with primary closure done. Operative findings included massively enlarged outer lobule of the left breast with the ulcerative destruction of the nipple areola complex. The deeper lobular structure of the breast was preserved. The excised breast tissue measures 25 cm x 15cm and weighs 2,000gm. She had an uneventful postoperative period and pain control using analgesic (Tablet Diclofenac Sodium 50 mg twice daily). She is still being followed up in the surgical outpatient clinic. **(Figure 2)** The histopathology showed fibroadenoma benign fibroepithelial lesion and ductal hyperplasia it also showed some degree of infection with leukocytic infiltration. **(Figure-3).**

DISCUSSION:

For a variety of reasons, giant breast tumors continue to pose a challenge in diagnosis and management. These tumors are poorly understood because of their rarity and unpredictable behavior. Their rapid growth, associated with skin congestion and ulceration, and tendency to recur, gives rise to a suspicion of malignancy.[13, 14, 15] This case posed a diagnostic challenge initially since the breast swelling was of short duration of 1 year and there was no previous or family history of breast asymmetry in this patient. More interesting is the fact that the tumor grew rather rapidly 2 months prior to presentation leading to ulceration of the skin and destruction of the nipple areola complex despite absence of a history of trauma and denial of application of caustic herbal

preparation by the patient. Even though the patient denied this our strong suspicion is that, as the usual practice is in developing countries such as India this patient first patronized local traditional doctors who applied local caustic lotion to the breast causing extensive necrosis and ulceration. It is not uncommon for patients in the developing world like India to try locally and herbal treatment at home but deny when asked for fear of being reprimanded. After the skin, ulceration there was history of rapid and progressive expansion of the fleshy part of the tumor that it outgrew and projected out of the skin cover. Hence at presentation our initial clinical diagnoses were fungating malignant breast tumor most likely Burkitt's lymphoma, phylloides tumors and carcinoma of the breast in that order. It was even more confusing because the initial histological diagnosis of incisional biopsy and imprint cytology was not conclusive although it suggested a benign breast lesion.

Owing to the varied histological features seen in giant breast tumors, there have been widely varying interpretations and diagnoses by pathologists.[16] This has led to inappropriate, and at times unnecessarily radical, surgical therapy. In the 1950s, breasts were amputated for this relatively not a life threatening condition.[17] However; the present trend is towards more conservative management. In the present case, a limited simple mastectomy was done. The left nipple-areola complex was removed together with a small elliptical piece of skin because of its proximity to the tumor stalk. The breast tissue beneath the mass was widely excised. Skin was primarily closed without much tension. The post-operative course was uneventful except for small superficial wound disruption.

Breast mass is not a common problem in the adolescent age group. Although primary breast cancer in this group has been reported, it is extremely rare.[13,14] The majority of breast masses in the young arise from congenital malformations or benign neoplasm. [2, 3] However, a breast lump is of great concern to the parents and physicians because of potential malignancy.[13]

CONCLUSION & LEARNING POINTS:

- It should be noted that huge masses growing rapidly in the breast can cause pressure atrophy of the surrounding normal breast tissue with subsequent ulceration of the overlying skin thus mimicking a malignant lesion of the breast and confuse undiscerning physicians.
- Detailed clinical examination of all breast lumps is important before deciding on appropriate surgical management.
- Proper pre - surgical planning is done even in the face of a benign fungating breast lesion before operating upon the patient, the breast can be saved with good cosmetic outcome as seen in this particular case.

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